the figures read 0″, 40″, 80″. To correspond with the diagram they should be 0″, 80″, 160″. In the same paper, at p. 436, a reference is made to *Astronomische Nachrichten* 3070 : this is a typographical error for 3076.

Yerkes Observatory, Williams Bay, Wisconsin :
1901 *July* 29.

Further Observations of Nova Aurigæ in 1901.

By E. E. Barnard.

Nova Aurigæ has been observed on two nights this year, and on each occasion its light was estimated in terms of the comparison stars used by Mr. Burnham in 1892. The comparisons were made with the stars B, E, *e*, G, H and J.

The result from all these made the *Nova* 12·7 magnitude on this scale.

Direct estimates on the two dates made the magnitude 13·0 and 12·9 respectively.

I also made independent estimates of the magnitudes of the comparison stars. They are :

	B	C	E	*e*	F	G	H	J	M	*m*
Oct. 21	13·5	15·0	11·8	13·2	10·0	11·7	12·0	12·0	12·0	12·0
22	—	15·0	12·1	14·0	10·0	12·0	12·3	12·4	12·5	—
	13·5	15·0	11·9	13·7	10·0	11·8	12·1	12·2	12·2	12·0

Of these stars Mr. Burnham has given the following magnitudes :

B 14·8 C 15·2 E 11·7 *e* 13·2 F 10·4 G 11·5 H 11·8 J 12·7
M 13·2 *m* 13·8.

His estimate of the brightness of B was doubtless influenced by the proximity of the greater brightness of the *Nova* in the spring of 1892.

In my estimates of the magnitudes of M and *m* no note was made for their relative brightness. My recollection is that M was somewhat the brighter of the two.

Under the best conditions the *Nova* has not appeared well-defined when in the best focus. There is a slight haziness about it suggestive of a slightly nebulous star.

1901 *October* 29.

On the Variation of T Centauri. By Alex. W. Roberts, D.Sc.

The variation of the star *T Centauri* (Chandler, 4896), R.A. $13^h\ 36^m\ 2^s$ (1900), Dec.$-33°\ 5'{\cdot}5$, was discovered in 1894 by Colonel Markwick, and independently the same year by Professor Pickering.

The Harvard notification of its discovery is given in the *Astronomische Nachrichten*, No. 3269, p. 72, and that of Colonel Markwick in the *Journal of the British Astronomical Association*, vol. v., p. 247. As far back as 1890, however, its variation was suspected by Kapteyn from an examination of the Cape Photographic Durchmusterung plates. His note on the variable magnitude indicated by the Cape Photographs is contained in *Astronomische Nachrichten*, No. 2987.

The following papers on the variation of *T Centauri* have already appeared in the *Monthly Notices*—

Vol. lvi., p. 35 (Markwick)
„ lvi., p. 347 (Roberts)
„ lvi., p. 500 (Roberts)
„ lviii., p. 513 (Markwick)

in which the nature and period of the star's variation are set forth.

Three years have now elapsed since the last of the four foregoing papers was published, and although observations made during these years have not in any way altered the general conclusions come to then, I think sufficient data have accumulated to enable a very accurate determination of the chief elements of the star's variation to be made.

In arriving at a determination of the period of *T Centauri*, or of any other long-period variable, it should be remembered that the possibility of the period being subject to a secular inequality is not unlikely. Because of this it is as well to include in the investigation only such maxima and minima as have been determined from a full-light curve, or at least from observations so situated on the light curve that they indicate, within a certain margin of error, the date of maximum or minimum brightness.

I have in other papers called attention to the uncertainty which always attaches to isolated meridian observations of magnitude; they are indeed of very little value as an aid to a definitive determination of light period unless the interval which separates the several dates is sufficiently great to compensate for the uncertainty in brightness.

If, of course, a meridian observation is manifestly taken near a maximum or minimum phase, then its value, as an aid to a